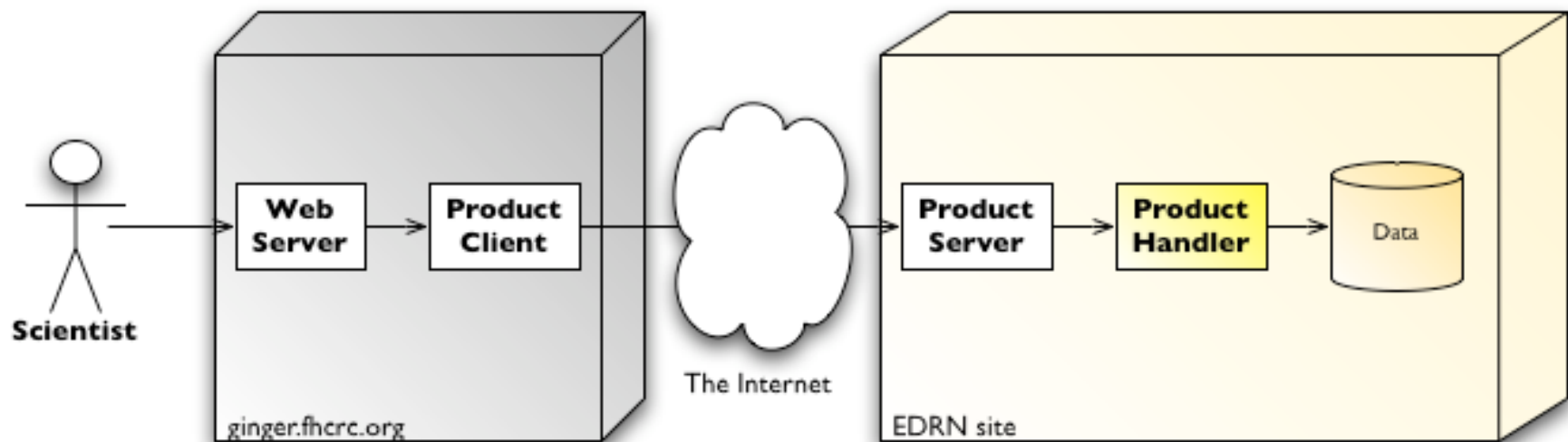


Architecture of the System

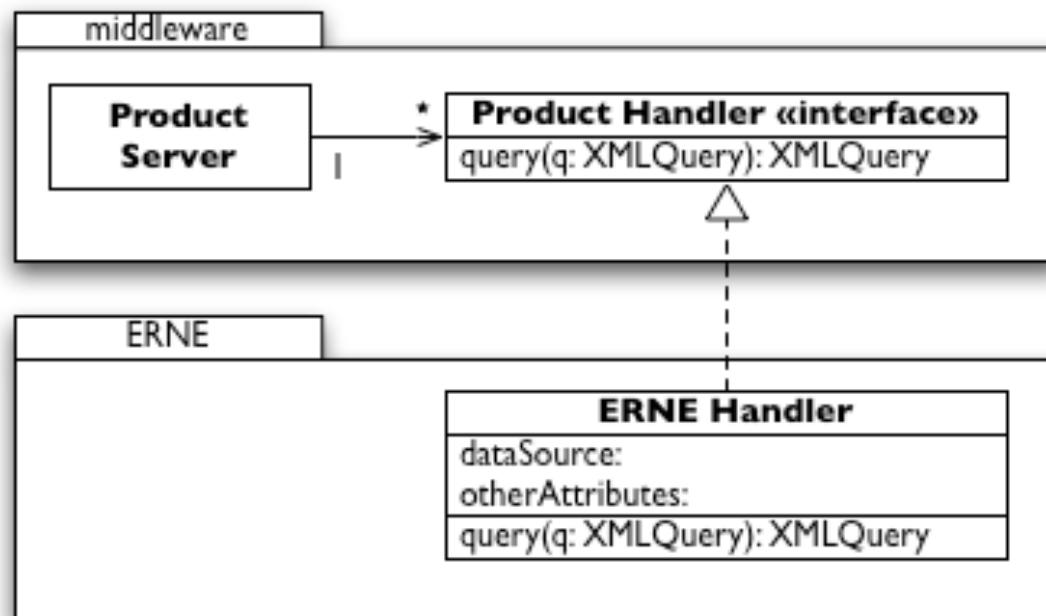


 = to be developed/provided for EDRN

Handling EDRN Products

- Such as specimens records, data runs, instrument runs, etc.
- Develop a *product handler*
 - Product handlers accept product queries
 - Accept generic query
 - Translate to local data system
 - Return as an Internet standard MIME type
 - Technologies
 - Java and MIME

Developing Product Handlers



Middleware for Products

- Download the ERNE Product Server
 - Available from the EDRN Secure Web Site
- Installer for four platforms
 - Mac OS X
 - Windows
 - Linux
 - Generic Unix

Implementing Product Handlers

- Installer starts a product server
 - Handles incoming queries
 - Translates query from CDE format
 - Queries your local specimen database
 - Translates results into CDE format

Security

- Communication
 - Encrypted over TLS/SSL v3
- Firewall
 - You must allow incoming TCP/IP
 - From ginger.fhcrc.org to port 7576
 - From ginger.fhcrc.org to port 7577
 - You must allow outgoing TCP/IP
 - To ginger.fhcrc.org port 443
 - To ginger.fhcrc.org port 1099

Conversion to/from CDEs

- Use the CDE mapping tool
 - Identify CDEs you support directly
 - Those which have a simple 1--1 mapping
 - Those which require algorithmic mapping
- NASA JPL software engineer uses your mapping
 - To develop a specific query handler for your site
 - Product server accepts and installs its query handler

Documentation and Downloads

- ERNE Product server
 - <http://www.compass.fhcrc.org/enterEDRN>
- Middleware Grid Services
 - <http://oodt.jpl.nasa.gov/grid/>
- ERNE Client Developer's Pack
 - <http://oodt.jpl.nasa.gov/erne-client/>